SHARP

VIDEO CD MINI SYSTEM
MINI-CHAÎNE CD VIDÉO
SISTEMA MINI VÍDEO CD
影音光碟迷你音響

MODEL
MODÈLE
MODELO
機型

CD-ES600V

OPERATION MANUAL
MODE D'EMPLOI
MANUAL DE MANEJO
使用説明書

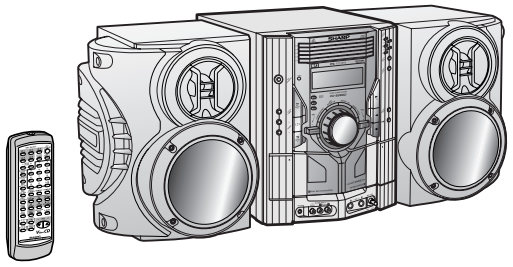
COMPACT disc DIGITAL AUDIO
COMPACT disc DIGITAL VIDEO
VIDEO CD
NTSC/PAL
MP3

CD-ES600V Video CD Mini System consisting of CD-ES600V (main unit) and CP-ES600V (speaker system).

Mini-chaîne CD vidéo CD-ES600V composée de CD-ES600V (appareil principal) et de CP-ES600V (enceinte acoustique).

Sistema mini vídeo CD CD-ES600V que consta de CD-ES600V (aparato principal) y CP-ES600V (sistema de altavoces).

CD-ES600V 影音光碟迷你音響包括 CD-ES600V（主機）和 CP-ES600V（揚聲器系統）。



CD-R/RW Playable

5-DISC CHANGER with Play Exchange

ENGLISH ··· Please refer to pages E-1 to E-46.
FRANÇAIS ··· Se reporter aux pages F-1 à F-46.
ESPAÑOL ··· Consulte las páginas S-1 a S-46.
中文 ··· 請參閱 E-1 至 E-46 頁。
عربي ··· يرجى مراجعة الصفحات ١ الى ٤٦.

SHARP CORPORATION

04/2/12 CD-ES600V(Z)_FR.fm TINSZA060AWZZ

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Introduction

Thank you for purchasing this SHARP product. To obtain the best performance from this product, please read this manual carefully. It will guide you in operating your SHARP product.

Special notes

Warning:

- When the ON/STAND-BY button is set at STAND-BY position, mains voltage is still present inside the unit. When the ON/STAND-BY button is set at STAND-BY position, the unit may be brought into operation by the timer mode or remote control.
- This unit contains no user serviceable parts. Never remove covers unless qualified to do so. This unit contains dangerous voltages, always remove mains plug from the socket before any service operation and when not in use for a long period.
- To prevent fire or shock hazard, do not expose this appliance to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the apparatus.

Note:

Audio-visual material may consist of copyrighted works which must not be recorded without the authority of the owner of the copyright. Please refer to the relevant laws in your country.

CAUTION

- This product is classified as a CLASS 1 LASER product.
- This product contains a low power laser device. To ensure continued safety do not remove any cover or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.

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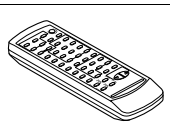
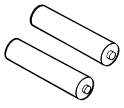
Accessories

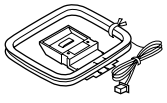
Please confirm that the following accessories are included.



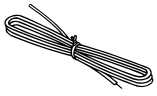
Remote control × 1



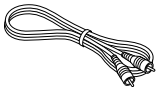
"AA" size battery (UM/SUM-3, R6, HP-7 or similar) × 2



AM loop aerial × 1



FM aerial × 1



Video cable × 1

Note:
Only the above accessories are included.

Contents

CD-ES600V

ENGLISH

Page

■ **General Information**
Precautions 3
Controls and indicators . . . . . 4 - 7

■ **Preparation for Use**
Remote control 8
System connections . . . . . 9 - 13

■ **Basic Operation**
General control 14
Setting the clock 15

■ **Disc Playback**
Video CD 16
Preparation for video CD playback 17
Video CD playback . . . . . 18 - 20
Advanced video CD playback . . . . . 21 - 25
CD playback . . . . . 26 - 28

■ **Radio**
Listening to the radio 29, 30

■ **Tape Playback**
Listening to a cassette tape (TAPE 1 or TAPE 2) 31, 32

■ **Karaoke**
Playing karaoke 33, 34

■ **Tape Recording**
Recording on a cassette tape . . . . . 35 - 37

■ **Advanced Features**
Timer and sleep operation . . . . . 38 - 41
Enhancing your system 42, 43

■ **References**
Troubleshooting chart . . . . . 43 - 45
Maintenance 45
Specifications 46

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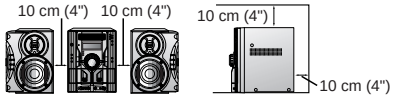
Precautions

■ General

- Please ensure that the equipment is positioned in a well ventilated area and ensure that there is at least 10 cm (4") of free space along the sides, top and back of the equipment.



- Use the unit on a firm, level surface free from vibration.
- Keep the unit away from direct sunlight, strong magnetic fields, excessive dust, humidity and electronic/electrical equipment (home computers, facsimiles, etc.) which generate electrical noise.
- Do not place anything on top of the unit.
- Do not expose the unit to moisture, to temperatures higher than 60°C (140°F) or to extremely low temperatures.
- If your system does not work properly, disconnect the AC power lead from the wall socket. Plug the AC power lead back in, and then turn on your system.
- In case of an electrical storm, unplug the unit for safety.
- Hold the AC power plug by the head when removing it from the wall socket, as pulling the lead can damage internal wires.
- **Do not remove the outer cover, as this may result in electric shock. Refer internal service to your local SHARP service facility.**
- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, curtains, etc.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Attention should be drawn to the environmental aspects of battery disposal.
- This unit should only be used within the range of 5°C - 35°C (41°F - 95°F).

Warning:
The voltage used must be the same as that specified on this unit. Using this product with a higher voltage other than that which is specified is dangerous and may result in a fire or other type of accident causing damage. SHARP will not be held responsible for any damage resulting from use of this unit with a voltage other than that which is specified.

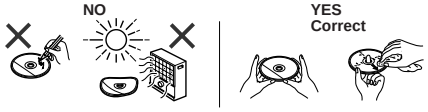
■ Volume control

The sound level at a given volume setting depends on speaker efficiency, location, and various other factors. It is advisable to avoid exposure to high volume levels. Do not turn the volume on to full at switch on and listen to music at moderate levels.

■ Care of compact discs

Compact discs are fairly resistant to damage, however mistracking can occur due to an accumulation of dirt on the disc surface. Follow the guidelines below for maximum enjoyment from your CD collection and player.

- Do not write on either side of the disc, particularly the non-label side from which signals are read. Do not mark this surface.
- Keep your discs away from direct sunlight, heat, and excessive moisture.
- Always hold the CDs by the edges. Fingerprints, dirt, or water on the CDs can cause noise or mistracking. If a CD is dirty or does not play properly, clean it with a soft, dry cloth, wiping straight out from the centre, along the radius.



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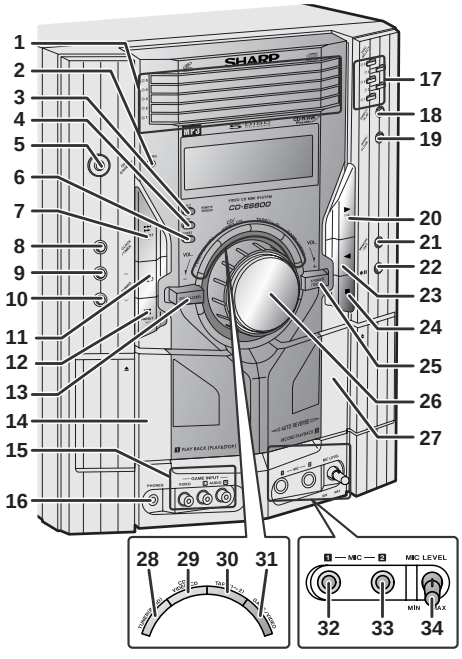
Controls and indicators



■ Front panel

Reference page

1. Disc Trays 18
2. Timer Indicator 39
3. Video CD Playback Control Button 20
4. Video CD On Screen Display On/Off Button 25
5. On/Stand-by Button 14
6. Video CD Digest/Time Search Button 23, 24
7. Video CD Skip or Next, CD/MP3 Disc Track Up or Fast Forward, Tape 2 Fast Wind, Tuner Preset Up, Time Up Button 15, 19, 30, 32
8. Clock/Timer Button 15, 38, 41
9. Tuning Up Button 29
10. Tuning Down Button 29
11. Tape 2 Reverse Mode Select Button 32
12. Video CD Skip or Previous, CD/MP3 Disc Track Down or Fast Reverse, Tape 2 Fast Wind, Tuner Preset Down, Time Down Button 15, 19, 30, 32
13. Equaliser Mode Select Button 14
14. Tape 1 Cassette Compartment 31
15. Game/Video Input Sockets 42
16. Headphone Socket 43
17. Disc Number Select Buttons 18
18. Disc Direct Play Button 21
19. Disc Tray Open/Close Button 18
20. Video CD Play or Repeat or Select or Resume, CD/MP3 Disc Play or Repeat, Tape 1 Play, Tape 2 Forward Play Button 18, 24, 26, 31, 32
21. Memory/Set Button 15, 27, 30, 38, 41
22. Tape 2 Record Pause Button 36, 37
23. Tape 2 Reverse Play Button 32
24. Video CD Stop or Return, CD/MP3 Disc/Tape Stop Button 19, 20, 32
25. Extra Bass/Demo Mode Button 13, 14
26. Volume Control 14
27. Tape 2 Cassette Compartment 32
28. Tuner (Band) Button 29
29. Video CD/CD/MP3 Disc Button 18
30. Tape (1 ⇀ 2) Button 31, 32
31. Game/Video Button 42
32. Microphone Socket 1 33
33. Microphone Socket 2 33
34. Microphone Level Control 33

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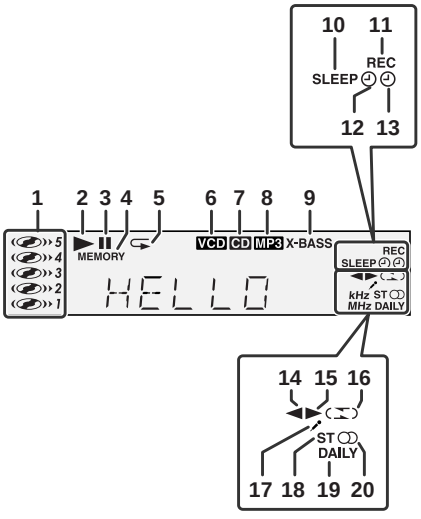
Controls and indicators (continued)



■ Display

Reference page
1. Disc Number Indicators 21
2. Disc Play Indicator 19
3. Disc Pause Indicator 19
4. Memory Indicator 27
5. Disc Repeat Play Indicator 26
6. Video CD Indicator 21
7. CD Indicator 26
8. MP3 Disc Indicator 28
9. Extra Bass Indicator 14
10. Sleep Indicator 41
11. Tape 2 Record Indicator 36
12. Timer Play Indicator 39
13. Timer Recording Indicator 39
14. Tape 2 Reverse Play Indicator 32
15. Tape 1 Play or Tape 2 Forward Play Indicator 31, 32
16. Tape Reverse Mode Indicator 32
17. Karaoke Mode Indicator 34
18. FM Stereo Mode Indicator 29
19. Daily Timer Indicator 39
20. FM Stereo Receiving Indicator 29

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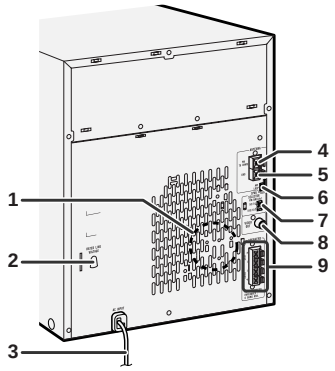
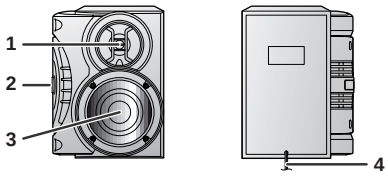


■ Rear panel

	Reference page
1. Cooling Fan	12
2. AC Voltage Selector	12
3. AC Power Lead	9, 12
4. FM 75 Ohm Aerial Terminal	9, 10
5. FM Aerial Earth Terminal	9, 10
6. AM Loop Aerial Socket	9, 10
7. Span Selector Switch	13
8. Video Output Socket	11
9. Speaker Terminals	9, 10



■ Speaker system

1. Tweeter
2. Passive Radiator
3. Woofer
4. Speaker Wire

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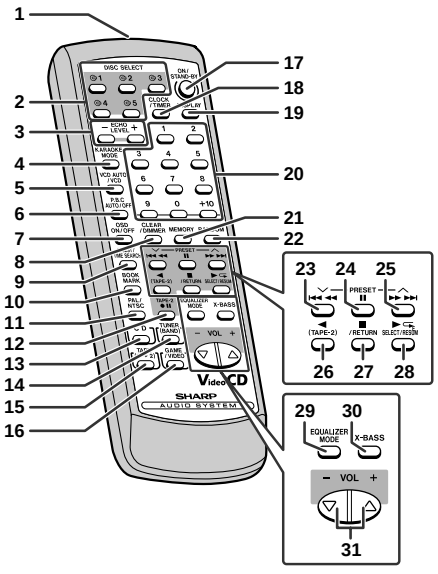
Controls and indicators (continued)



■ Remote control

Reference page

1. Remote Control Transmitter 8
2. Disc Number Select Buttons 18
3. Echo Level Up and Down Buttons 33
4. Karaoke Mode Button 34
5. Video CD Auto/On Button 25
6. Video CD Playback Control Auto/Off Button 20
7. Video CD On Screen Display On/Off Button 25
8. Disc Clear/Dimmer Button 14, 27
9. Video CD Digest/Time Search Button 23, 24
10. Video CD Bookmark Button 22
11. PAL/NTSC Select Button 17
12. Tape 2 Record Pause Button 36, 37
13. Video CD/CD/MP3 Disc Button 18
14. Tuner (Band) Button 29
15. Tape (1 ↔ 2) Button 31, 32
16. Game/Video Button 42
17. On/Stand-by Button 14
18. Clock/Timer Button 15, 38, 41
19. MP3 Disc Display Button 28
20. Disc Direct Search Buttons 21
21. Memory/Set Button 15, 27, 30, 38, 41
22. Disc Random Button 26
23. Video CD Skip or Previous, CD/MP3 Disc Track Down or Fast Reverse, Tape 2 Fast Wind, Tuner Preset Down, Time Down Button 15, 19, 30, 32
24. Disc Pause Button 19
25. Video CD Skip or Next, CD/MP3 Disc Track Up or Fast Forward, Tape 2 Fast Wind, Tuner Preset Up, Time Up Button 15, 19, 30, 32
26. Tape 2 Reverse Play Button 32
27. Video CD Stop or Return, CD/MP3 Disc/Tape Stop Button 19, 20, 32
28. Video CD Play or Repeat or Select or Resume, CD/MP3 Disc Play or Repeat, Tape 1 Play, Tape 2 Forward Play Button 18, 24, 26, 31, 32
29. Equaliser Mode Select Button 14
30. Extra Bass Button 14
31. Volume Up and Down Buttons 14

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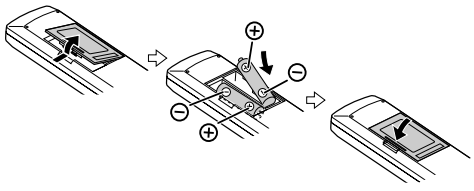
Remote control

■ Battery installation

1 Remove the battery cover.
2 Insert the supplied batteries according to the direction indicated in the battery compartment.
When inserting or removing the batteries, push them towards the ⊖ battery terminals.
3 Replace the cover.



Precautions for battery use:
- Replace all old batteries with new ones at the same time.
- Do not mix old and new batteries.
- Remove the batteries if the unit is not to be used for long periods of time. This will prevent potential damage due to battery leakage.

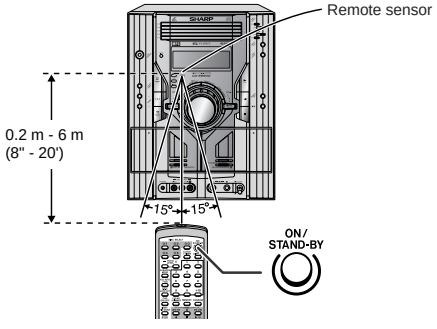
Caution:
- Do not use rechargeable batteries (nickel-cadmium battery, etc.).
- Installing the batteries incorrectly may cause the unit to malfunction.

Notes concerning use:
- Replace the batteries if the operating distance is reduced or if the operation becomes erratic. Purchase 2 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar).
- Periodically clean the transmitter on the remote control and the sensor on the unit with a soft cloth.
- Exposing the sensor on the unit to strong light may interfere with operation. Change the lighting or the direction of the unit.
- Keep the remote control away from moisture, heat, shock, and vibrations.

■ Test of the remote control

Check the remote control after checking all the connections (see pages 9 - 12).
Point the remote control directly at the remote sensor on the unit.

The remote control can be used within the range shown below:
Press the ON/STAND-BY button. Does the power turn on? Now, you can enjoy music.



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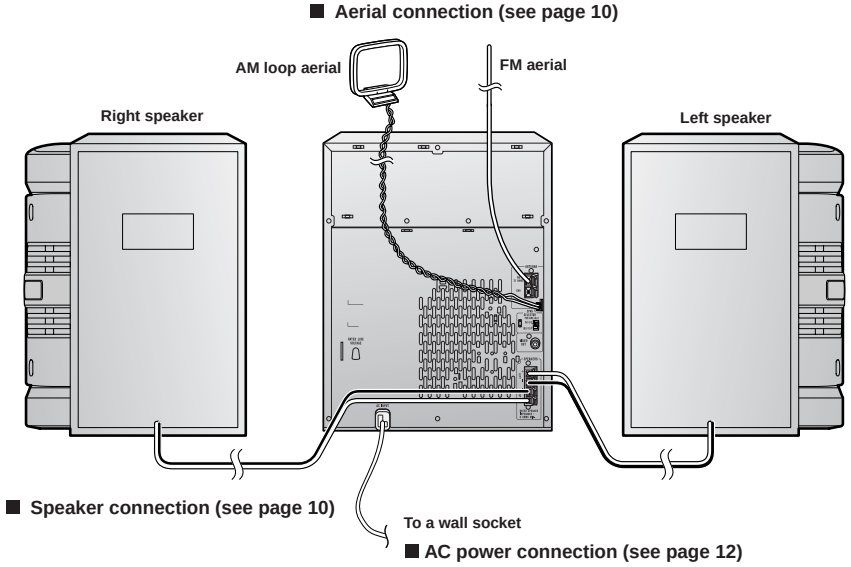
System connections

Make sure to unplug the AC power lead before any connections.


■ Aerial connection (see page 10)
AM loop aerial
FM aerial
Right speaker
Left speaker
■ Speaker connection (see page 10)
To a wall socket
■ AC power connection (see page 12)

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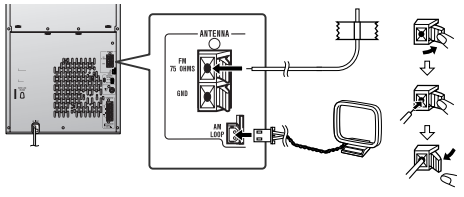
■ Aerial connection

Supplied FM aerial:
Connect the FM aerial wire to the FM 75 OHMS terminal and position the FM aerial wire in the direction where the strongest signal can be received.

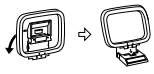
Supplied AM loop aerial:
Connect the AM loop aerial to the AM LOOP socket. Position the AM loop aerial for optimum reception. Place the AM loop aerial on a shelf, etc., or attach it to a stand or a wall with screws (not supplied).



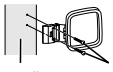
Note:
Placing the aerial on the unit or near the AC power lead may cause noise pickup. Place the aerial away from the unit for better reception.

Installing the AM loop aerial:

< Assembling >



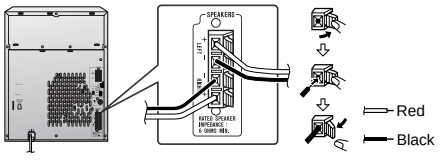
< Attaching to the wall >



Wall Screws (not supplied)

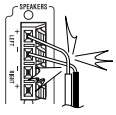
■ Speaker connection

Connect the black wire to the minus (-) terminal, and the red wire to the plus (+) terminal.



Caution:

- Use speakers with an impedance of 6 ohms or more, as lower impedance speakers can damage the unit.
- Do not mistake the right and the left channels. The right speaker is the one on the right side when you face the unit.
- **Do not let the bare speaker wires touch each other.**
- Do not stand or sit on the speakers. You may be injured.



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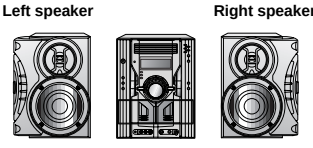
System connections (continued)

■ Placing the speaker system

The left and right speakers have individual shapes. For best performance, place the speakers according to the diagram below.



Notes:

- The speakers are magnetically shielded.
  Therefore, they do not affect the display even you use them near the TV. However, some colour variation may occur, depending on the type of TV used.

  If colour variation occurs...
  Turn off the TV (from the power switch).
  After 15 - 30 minutes, turn the TV on again.

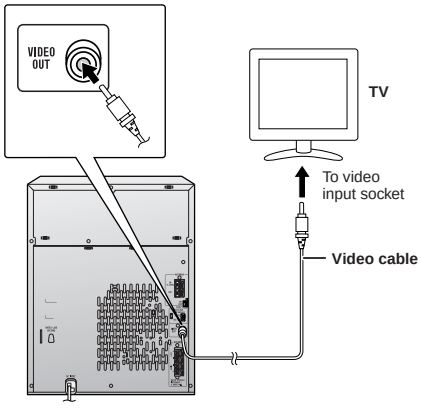
  If the colour variation is still present...
  Move the speakers further away from the TV.

- If any kind of magnet or an electromagnet is placed too close to the TV and the system, irregular colours may appear on the TV screen.

Note:
The speaker grilles are not removable.

■ TV/monitor connection

If the TV/monitor has a video input, connect it to the VIDEO OUT socket on the rear of the unit.



Note:
If the TV/monitor does not have a video input, the VIDEO OUT socket on the unit should be connected to a VCR with a video input, which in turn should be connected to the TV/monitor through the TV ANTENNA/CABLE input. (Be sure to turn on the VCR, and set the VCR's input mode to "auxiliary".)

04/2/23 CD-ES600V(Z)E2.fm TINSZA060AWZZ

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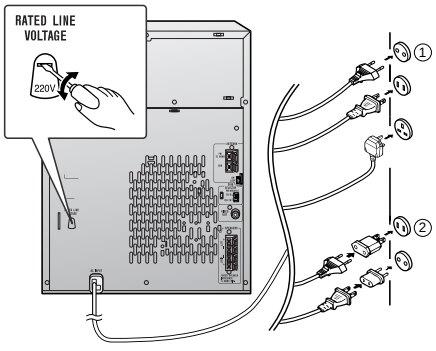


■ Setting the AC voltage selector

Check the setting of the AC voltage selector located on the rear panel before plugging the unit into a wall socket. If necessary, adjust the selector to correspond to the AC power voltage used in your area.

Turn the selector with a screwdriver until the appropriate voltage number appears in the window (110 V, 127 V, 220 V or 230 V - 240 V AC).

■ AC power connection

After checking all the connections have been made correctly, plug the AC power lead of this unit into the wall socket. If you plug the unit first, the unit will enter the demonstration mode (see page 13).

Notes:

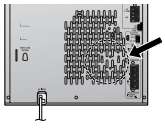
- The unit will start the tape initialisation when plugged in to the AC socket. During this process, initialising sound will be heard and the unit cannot be turned on. Wait until the process is finished.
- Unplug the AC power lead from the wall socket if the unit will not be in use for a prolonged period of time.

AC Plug Adaptor

In areas (or countries) where a wall socket as shown in illustration ② is used, connect the unit using the AC plug adaptor supplied with the unit, as illustrated. The AC plug adaptor is not included in areas where the wall socket and AC power plug can be directly connected (see illustration ①).

Cooling fan:

This product is equipped with a cooling fan inside, which begins to run at a specified volume level for better heat radiation.



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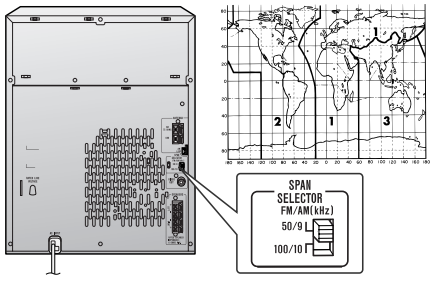
System connections (continued)

■ Setting the FM/AM span selector



The International Telecommunication Union (ITU) has established that member countries should maintain either a 100 kHz or a 50 kHz interval between broadcasting frequencies of FM stations and 10 kHz or 9 kHz for AM station. The illustration shows the 50/9 kHz zones (regions 1 and 3), and the 100/10 kHz zone (region 2).
Before using the unit, set the SPAN SELECTOR switch (on the rear panel) to the interval (span) of your area.

To change the tuning zone:

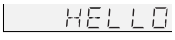
1 Press the ON/STAND-BY button to enter the stand-by mode.
2 Set the SPAN SELECTOR switch (on the rear panel) as follows.
- For 50 kHz FM interval (9 kHz in AM) → 50/9
- For 100 kHz FM interval (10 kHz in AM) → 100/10

3 Whilst pressing down the ●II button and the X-BASS/DEMO button, press the ⏮ ◀◀ PRESET ∨ button until "CLEAR AL" appears.

Caution:
This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

■ Demonstration mode

The first time the unit is plugged in, the unit will enter the demonstration mode. You will see words scroll.



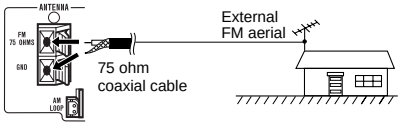
To cancel the demonstration mode:
When the unit is in the power stand-by mode (demonstration mode), press the X-BASS/DEMO button. The demonstration mode will be cancelled and the display will disappear.

To return to the demonstration mode:
When the unit is in the power stand-by mode, press the X-BASS/DEMO button again.

Note:
When the power is on, the X-BASS/DEMO button can be used to select the extra bass mode.

■ External FM aerial

Use an external FM aerial if you require better reception.
Consult your dealer.



Note:
When an external FM aerial is used, disconnect the supplied FM aerial wire.

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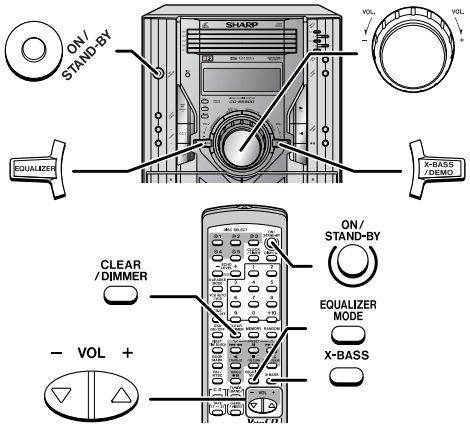
General control



■ To turn the power on

Press the ON/STAND-BY button to turn the power on.

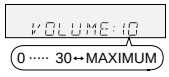
After use:
Press the ON/STAND-BY button to enter the power stand-by mode.

■ Illumination light control

When the power is turned on, light illuminates around the display. To turn on/off the light, hold down the CLEAR/DIMMER button on the remote control for 2 seconds or more.

■ Volume control

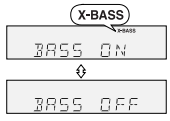
Main unit operation:
When the VOLUME control is turned clockwise, the volume will increase. When it is turned anti-clockwise, the volume will decrease.



Remote control operation:
Press the VOL (+ or -) button to increase or decrease the volume.

■ Bass control (X-BASS)

When the power is first turned on, the unit will enter the extra bass mode which emphasises the bass frequencies, and "X-BASS" will appear. To cancel the extra bass mode, press the X-BASS/DEMO (X-BASS) button.



■ Equaliser

When the EQUALIZER (EQUALIZER MODE) button is pressed, the current mode setting will be displayed. To change to a different mode, press the EQUALIZER (EQUALIZER MODE) button repeatedly until the desired sound mode appears.

In CD/TUNER/TAPE mode		In GAME/VIDEO mode	
FLAT	The sound is not modified.	FLAT	The sound is not modified.
ROCK	Bass and treble are emphasised.	ROCK	Bass and treble are emphasised.
CLASSIC	Treble is cut a little.	CLASSIC	Treble is cut a little.
POPS	Bass and treble are slightly emphasised.	ACTION	Bass is emphasised.
VOCAL	Vocals (midrange tones) are emphasised.	SPORTS	Vocals and treble are emphasised.
JAZZ	Treble is slightly emphasised.	RACING	Bass and treble are emphasised more.

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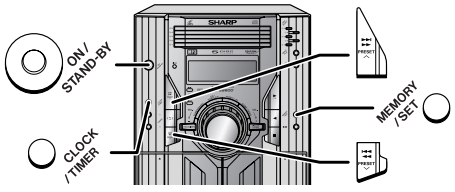
Setting the clock



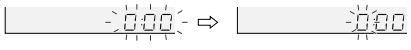
In this example, the clock is set for the 24-hour (0:00) display.

1 **Press the ON/STAND-BY button to turn the power on.**

2 **Press the CLOCK/TIMER button.**

3 **Within 10 seconds, press the ⏮ ◀◀ or ▶▶ ⏭ button to select "CLOCK", and press the MEMORY/SET button.**

4 **Press the ⏮ ◀◀ or ▶▶ ⏭ button to select 24-hour or 12-hour display and then press the MEMORY/SET button.**



"0:00" → The 24-hour display will appear. (0:00 - 23:59)

"AM 12:00" → The 12-hour display will appear. (AM 12:00 - PM 11:59)

"AM 0:00" → The 12-hour display will appear. (AM 0:00 - PM 11:59)

5 **Press the ⏮ ◀◀ or ▶▶ ⏭ button to adjust the hour and then press the MEMORY/SET button.**

Press the ⏮ ◀◀ or ▶▶ ⏭ button once to advance the time by 1 hour. Hold it down to advance continuously.

6 **Press the ⏮ ◀◀ or ▶▶ ⏭ button to adjust the minutes and then press the MEMORY/SET button.**

Press the ⏮ ◀◀ or ▶▶ ⏭ button once to advance the time by 1 minute. Hold it down to change the time in 5-minute intervals.

To confirm the time display:
[When the unit is in the stand-by mode]
Press the CLOCK/TIMER button.
The time display will appear for about 10 seconds.

[When the power is on]
Press the CLOCK/TIMER button.
Within 10 seconds, press the ⏮ ◀◀ or ▶▶ ⏭ button to display the time.
The time display will appear for about 10 seconds.

Note:
The "CLOCK" will appear or time will flash to confirm the time display when the AC power supply is restored after a power failure or unplugging the unit. If incorrect, readjust the clock as follows.

To readjust the clock:
Perform "Setting the clock" from step 1. If the "CLOCK" does not appear in step 3, step 4 (for selecting the 24-hour or 12-hour display) will be skipped.

To change the 24-hour or 12-hour display:

1 Clear all the programmed contents. [Refer to "Clearing all the memory (reset)" on page 45 for details.]
2 Perform "Setting the clock" from step 1.

Note:
The clock can also be set with the remote control.

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Video CD

Any CD that contains motion pictures can be played.
You can enjoy motion pictures with the sound quality of MDs and the picture quality of VHS tapes.
Digital compression technology allows the continuous playback of up to 74 minutes from a 12 cm disc.
With video CDs, you can select the items you want to watch from the on-screen menu. Discs which support "Playback control" can display still pictures (see page 20).
The disc symbols are found on the disc labels or jackets.

Symbol		
Size	8 cm (3")	12 cm (5")
Label sides	1 side	1 side
Audio recording format	Digital (max. 20 min)	Digital (max. 74 min)
Video recording format	MPEG 1	

■ Types of discs

This unit handles video CDs that support PBC (version 2.0). (PBC is an abbreviation of "Playback control".)
You can enjoy the following two types of playback, depending on the disc.

Disc type	**Features**
Video CDs without PBC (version 1.1)	Sound and motion pictures can be played using the same control operations as applied to music CDs.
Video CDs with PBC (version 2.0)	In addition to the features shown above (for discs without PBC), PBC CDs have a menu that is displayed on the TV screen. You can play interactive games and make use of other software with the retrieval function (menu playback). You can also display high resolution or normal still pictures.

Notes:
- Analogue system CDVs (12 cm) cannot be played.
- Photo CDs and CD-ROMs cannot be played.

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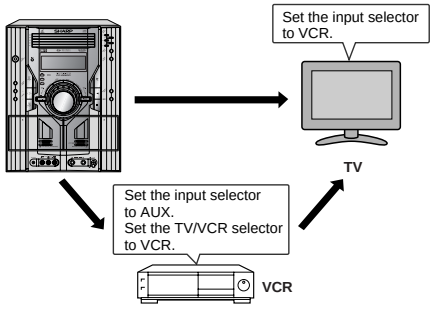
Preparation for video CD playback

■ Adjusting the TV and VCR

The TV or VCR input varies according to the connection method. Be sure to make the settings correctly. (Then, follow the playback procedure on page 18 to check the settings.)

<For TV sets with a video input socket>

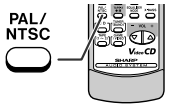


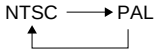
<For TV sets without a video input socket>

■ Selecting the video output format

Video CD is recorded in PAL or NTSC format.
Select the video output format (NTSC or PAL) according to your TV or VCR.

To select the video output format:
Whilst in the stop mode, press the PAL/NTSC button.
Each time this button is pressed, the format will change in the following order:





Notes:

- When you watch a PAL disc in the NTSC mode or an NTSC disc in the PAL mode, the vertical size of the picture will not be modified.
- If a multi-mode TV is equipped with an input selector switch, set the switch to "MULTI MODE". For the details, refer to the TV operation manual.
- Do not change the video output format during playback. If you do, the picture signal may not be output properly.
- Picture may be distorted when the setting is switched. This is not the malfunction of the unit.
- The selected NTSC or PAL mode is retained even when you turn on/off the unit or switch functions. The mode returns to the default if the AC power lead is left disconnected. Select a mode again.
- Whilst playing an audio CD or MP3 disc, you cannot switch to NTSC or PAL.

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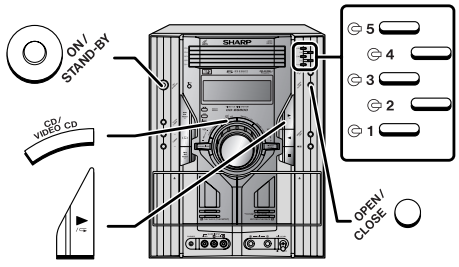
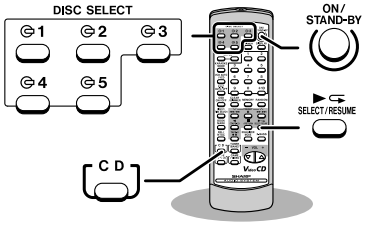
Video CD playback

Playback control:
Video CDs that support "Playback control" can display still pictures. This function can be used with video CD software (video CDs with playback control) that have a playback method recorded on them. You can select items you want to watch from the menu displayed on the TV screen, or you can show still pictures.

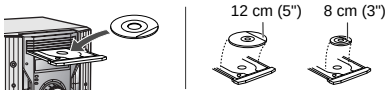
Turn on the TV and set the input selector to "VCR".





■ Playback

1	**Press the ON/STAND-BY button to turn the power on.**
2	**Press the CD/VIDEO CD (CD) button.**
3	**Press the ⊂ 1 button and within 5 seconds, press the OPEN/CLOSE button to open the disc tray 1.**
4	**Place the disc on the disc tray 1, label side up.** Be sure to place 8 cm (3") disc in the middle of the disc trays.
5	**Press the OPEN/CLOSE button to close the disc tray 1.**
6	**You can place discs on the trays 2 - 5 by following steps 3 - 5.**
7	**Press the ► / ⊃ (► ⊃ SELECT/RESUME) button to start playback.**



- Playback will begin from track 1 on the disc 1. After that disc finishes playing, the next disc will automatically play.
- After the last track on the fifth disc is played, the unit will stop automatically.
- When there is no disc in one of the disc trays (1 - 5), the empty tray will be skipped to the next tray with a disc.

To exchange other discs whilst playing a disc:
Press one of the ⊂ 1 - ⊂ 5 buttons for the stopped disc and within 5 seconds, press the OPEN/CLOSE button and exchange discs.

To remove the discs:
In the stop mode, press the ⊂ 1 - ⊂ 5 button and within 5 seconds, press the OPEN/CLOSE button.

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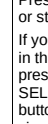
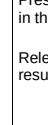
Video CD playback (continued)

Notes:
- Whilst the disc is being read ("TOC READ" is displayed), you cannot play another disc. The ⓒ 1 - ⓒ 5 buttons work, but the ► / ⊂ (► ⊂ SELECT/RESUME) button does not.
- Playback control allows a video CD to be played back according to instructions recorded on the disc. The "previous", "next", "return" and "select" operations may function differently, depending on the PBC CDs.
- Some video CDs with playback control may have an "auto pause" recorded on them. When such a disc is played, the screen will stop automatically at the point where an "auto pause signal" has been inserted.
- If the picture looks dirty when a video CD is played back, there may be a scratch on the video CD. Replace it with another video CD in good condition.

Caution:
- Do not place two discs in one disc tray.
- Do not play discs with special shapes (heart- or octagon-shaped) as it may cause malfunctions.
- Do not push the disc tray whilst it is moving.
- If the power fails whilst the tray is open, wait until the power is restored.
- If the disc tray is stopped with force, "ER-CD20" will appear on the display for 3 seconds and the unit will not function. If this occurs, press the ON/STAND-BY button to enter the power stand-by mode and then turn the power on again.
- If TV or radio interference occurs during CD operation, move the unit away from the TV or radio.
- If a disc is damaged, dirty, or loaded upside down, the disc will skip.

Auto power on function:
When you press any of the following buttons, the unit turns on.
- CD/VIDEO CD (CD) button (main unit and remote control): The unit turns on and the "CD/VIDEO CD" function is activated.
- ► / ⊂ (► ⊂ SELECT/RESUME) button (main unit and remote control): The unit turns on and playback of the last function starts (CD/VIDEO CD, TAPE, TUNER, GAME).

■ Various disc functions

Function	Main unit	Remote control	Operation
Play			Press in the stop mode.
Stop			Press in the playback mode.
Pause			Press in the playback mode. Press the ► / ⊂ (► ⊂ SELECT/RESUME) button to resume playback from the paused point.
Track up/ Track down (One disc only)			Press in the playback or stop mode. If you press the button in the stop mode, press the ► / ⊂ (► ⊂ SELECT/RESUME) button to start the desired track.
Fast forward/Fast reverse (One track only)			Press and hold down in the playback mode. Release the button to resume playback.

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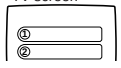
Notes:
- Operations may be different from the above in the P.B.C. mode.
- Pictures are shown intermittently and no sound is heard during fast forward or fast reverse on video CDs.
- During fast forward/fast reverse, no sound is produced. Images may be distorted or become noisy, or discolouration may occur.

■ Playback of a video CD (CDs) with P. B. C. (Version 2.0)

1 **Press the ► / ⊂ (► ⊂ SELECT/RESUME) button.**

A menu will appear on the TV and playback will be paused.

<TV screen>



2 **Select the desired menu number using the direct search buttons on the remote control.**

- Playback will begin.
- After playback has finished, the menu will reappear. Select the menu number you want to play.

To stop the current operation and return to the menu:
Press the ■ (■/RETURN) button for less than 0.5 seconds.

To completely stop the video CD:
Hold down the ■ (■/RETURN) button for more than 1 second.

The P.B.C. function will not work in the following conditions.
When repeat, random, programme, direct track search, bookmark, resume, disc digest, track digest or time search play has been selected and playback begins.

■ To move the menu screen (menu screen with more than 1 page) (Video CD with P.B.C. only)

To move to the next menu screen:
Whilst in the stop mode, press the ▶▶I button.
To return to the previous menu screen:
Whilst in the stop mode, press the I◀◀ button.

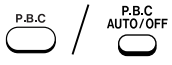
Note:
This function may not work, depending on the disc.

■ To play without activating the playback control function (Video CD with P.B.C. only)

You can play a video CD with P.B.C. without activating the playback control function.
In this case, the menu screen will not appear, and the disc will be played in the same way as a video CD without P.B.C.

1 **Whilst in the stop mode, press the P.B.C (P.B.C AUTO/OFF) button to cancel the P.B.C. mode.**

The P.B.C. function cannot be cancelled whilst the menu screen is displayed.



<TV screen>

2 **Press the ► / ⊂ (► ⊂ SELECT/RESUME) button.**

Playback will begin.

Notes:
- The P.B.C. function can also be cancelled whilst in the playback mode.
- Some video CDs with P.B.C. cannot be played back when the P.B.C. mode is off.

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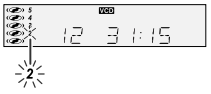
Advanced video CD playback

■ To specify a disc to play

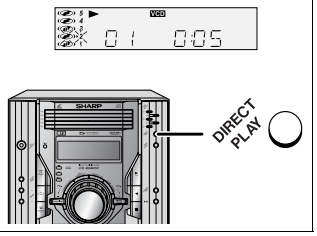
You can play a disc by specifying the disc number.

1 Press one of the ⍥1 - ⍥5 buttons to select the desired disc.



Selected disc number

2 Within 5 seconds, press the DIRECT PLAY button on the main unit.



- Playback will begin from track 1 on the chosen disc.
- After the last track on the chosen disc is played, the unit stops automatically.

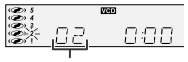
Note:
If the button of the disc tray with no disc is pressed, playback will not start and the disc indicator will go out.

To stop playback:
Press the ■ (■/RETURN) button.

■ Direct track search

By using the direct search buttons, the desired tracks on the current disc can be played.

Use the direct search buttons on the remote control to select the desired track whilst playing the selected disc.

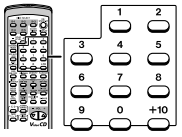


Selected track number

- The direct search buttons allow you to select up to number 9.
- When selecting number 10 or higher, use the "+10" button.

A. For example, to choose 13

1 Press the "+10" button once.
2 Press the "3" button.



B. For example, to choose 30

1 Press the "+10" button three times.
2 Press the "0" button.

If the direct search buttons are pressed whilst the disc is stopped, press the ► / ⍈ (► ⍈ SELECT/RESUME) button to start the desired track on the current disc.

Notes:
- A track number higher than the number of tracks on the disc cannot be selected.
- During random play, direct search is not possible.
- For MP3 discs, you can select the track number but cannot select the folder by pressing the direct search button(s).
- This function does not work during P.B.C. play. Cancel the P.B.C. mode when playing video CDs with P.B.C.

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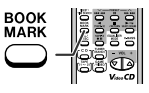
■ To create a bookmark

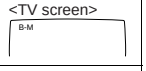
This function marks the desired scene on the video CD to play it back easily. (Up to 9 scenes per disc can be marked.)

1 Whilst in the playback mode, press the BOOKMARK button on the remote control when the desired scene is displayed.



"B-M" will appear on the TV screen for a few seconds.

<TV screen>



2 Repeat step 1.

- Up to 9 scenes can be marked.
- If more than 9 bookmarks are created, bookmarks will be erased in the order they were created.

To recall a bookmarked scene:

1 Whilst in the stop or playback mode, hold down the BOOKMARK button on the remote control for more than 1 second.

"BOOKMARK DIGEST" will appear before the marked scenes and numbers are displayed on the TV screen. Each time a bookmarked scene is displayed, you can hear the first several seconds of the scene. After displaying every scene, this unit will enter the pause mode automatically.

2 Press the direct search buttons on the remote control to select the scene you want to play back.

- Playback will begin from the selected scene.
- After the last track on the fifth disc is played, the unit will stop automatically.

<TV screen>

To cancel the bookmark function:
Press the ■ (■/RETURN) button.

Notes:

- Even if the unit is set to the stand-by mode or the function is changed from CD/VIDEO CD to some other function, the marks will not be erased.
- Opening the disc tray automatically erases the marks.
- This function is invalid with still pictures (menu display, photo, etc.).
- This function is not available with an audio CD or MP3 disc.

Caution:

- This function does not work during P.B.C. play. Cancel the P.B.C. mode when playing video CDs with P.B.C.
- This function does not work during programmed play.

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Advanced video CD playback (continued)

■ Time search selection

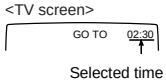
You can play back from the desired scene by specifying the time.

1 Whilst in the playback mode, hold down the DIGEST (DIGEST/TIME SEARCH) button to enter the time search mode.

2 Use the direct search buttons on the remote control to specify the time.

[For example, to select 2 minutes and 30 seconds.]

Press "0", "2", "3", "0" successively.



Selected time

- The point of specified time will be located on the track being played and playback will resume from that point.
- After the last track on the fifth disc is played, the unit will stop automatically.

To cancel the time search operation:
Press the ■ (■/RETURN) button.

Notes:
- Time search mode will be cancelled automatically if the desired time is not entered within 10 seconds.
- This operation is not accepted by still pictures (menu display, photo, etc.).
- This function is not available with an audio CD or MP3 disc.

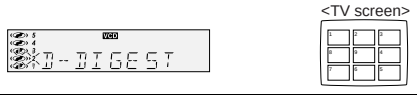
Caution:
- This function does not work during P.B.C. play. Cancel the P.B.C. mode when playing video CDs with P.B.C.
- This function does not work during programmed play.

■ Disc digest selection

You can play back a desired track by selecting one from the 9 displayed tracks on the screen.

1 Whilst in the stop mode, press the DIGEST (DIGEST/TIME SEARCH) button.

- Up to 9 tracks will be displayed on the screen.
- Each time a track is displayed, you can hear the first several seconds of the track.



2 Press the direct search buttons on the remote control to select the desired track.

- Playback will be started from the selected track.
- After the last track on the fifth disc is played, the unit will stop automatically.

When there are more than 9 tracks on the video CD:
Each press of the ▶▶I button will display the next 9 tracks.
Press the I◀◀ button to return to the previous display.

To cancel the disc digest:
Press the ■ (■/RETURN) button.

Notes:
- The disc digest function is available only in the stop mode.
- This function is not available with an audio CD or MP3 disc.

Caution:
- This function does not work in the P.B.C. mode, which will be automatically cancelled when you press the DIGEST (DIGEST/TIME SEARCH) button.
- This function does not work during programmed play.

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■ Track digest selection

Each track is divided into 9 sections.
You can look at the sections and select the scene you want to start watching from. This function is convenient when you want to start from the middle of an undivided track, for example, a movie.

1 During playback, press the DIGEST (DIGEST/TIME SEARCH) button.

- The track being played back will be divided into 9 sections and playback will be paused.
- Each time a divided section is displayed, you can hear the first several seconds of the section.

<TV screen>

2 Press the direct search buttons on the remote control to select the scene you want to watch.

- Playback will be started from the selected scene.
- After the last track on the fifth disc is played, the unit will stop automatically.

To cancel the track digest operation:
Press the ■ (■/RETURN) button.

Notes:
- The track digest function works only during playback.
- This operation is not available for short tracks (less than one minute) or still pictures (menu display, photo, etc.).
- One track is divided into nine frames of equal playing time.
- This function is not available with an audio CD or MP3 disc.

Caution:
- This function does not work during P.B.C. play. Cancel the P.B.C. mode when playing video CDs with P.B.C.
- This function does not work during programmed play.

■ Resume play

This function is to restart playback from the point where it has stopped.

During the stop mode, hold down the ► / ⮌ (► ⮌ SELECT/RESUME) button for more than 1 second.

Playback will begin at the point where playback has stopped.

Notes:
- Resume play cannot be activated when the function is changed from CD/VIDEO CD to another or the unit is set to the power stand-by mode.
- Resume play cannot be performed whilst opening the disc tray or after changing the disc.
- This function does not work during P.B.C. play. Cancel the P.B.C. mode when playing video CDs with P.B.C.

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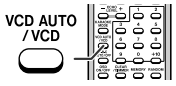
Advanced video CD playback (continued)

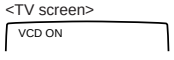
■ To play back the video CD manually

Usually this unit detects the video CD and plays back pictures and sounds. In case this unit fails to judge it correctly, you can play back the video CD manually.

1 Press the VCD AUTO/VCD button until "VCD ON" appears on the TV screen.



<TV screen>

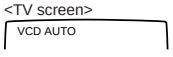


2 Press the ► / ⊂▸ (►⊂▸ SELECT/RESUME) button.

To return to the automatic video CD detection mode:

Press the VCD AUTO/VCD button until "VCD AUTO" appears on the TV screen.

<TV screen>



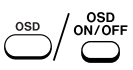
Notes:

- This setting will be cancelled when you change the discs.
- Whilst in the "VCD ON" state, you cannot play back audio CDs.
- This setting will not work during video CD and MP3 disc playback.

■ Changing the TV screen display

You can check the operation of the main unit by the on-screen display.

Each time the OSD (OSD ON/OFF) button is pressed during playback or in the stop mode, the display will change as follows:



[During stop mode]

[During playback]

Note:

The displays may differ depending on the discs.

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CD playback

This system can also play audio CD-R and CD-RW discs, but cannot record.
Some audio CD-R and CD-RW discs may not be playable due to the state of the disc or the equipment used for recording.

The following playback functions are the same as video CD operations.

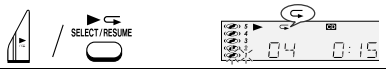
Page
Playback 18
Various disc functions 19
To specify a disc to play 21
Direct track search 21
Changing the TV screen display 25

■ Repeat play

Repeat play can play all 5 discs, all tracks on a chosen disc, or a programmed sequence continuously.

To repeat all tracks on up to 5 discs:
Press the ► / ⮌ (► ⮌ SELECT/RESUME) button twice.

To repeat desired tracks:
Perform steps 1 - 6 in the "Programmed play" section on page 27 and then press the ► / ⮌ (► ⮌ SELECT/RESUME) button twice.



To cancel repeat play:
Press the ► / ⮌ (► ⮌ SELECT/RESUME) button again.
"⮌" will go out.

To repeat all tracks on the chosen disc:
1 Press one of the ⓒ 1 - ⓒ 5 buttons.
2 Within 5 seconds, press the DIRECT PLAY button twice.

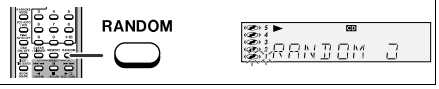
To cancel repeat play:
Press the DIRECT PLAY button again.
"⮌" will go out.

Note:
This function also works on video CDs without P.B.C.

■ Random play

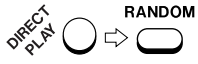
The tracks on the disc(s) can be played in random order automatically.

To random play all tracks on up to 5 discs:
Press the RANDOM button on the remote control.



To cancel random play:
Press the ► / ⮌ (► ⮌ SELECT/RESUME) button.
"NORMAL" will appear for 2 seconds.

To random play all tracks on the chosen disc:
1 Press one of the ⓒ 1 - ⓒ 5 buttons.
2 Within 5 seconds, press the DIRECT PLAY button.
3 Press the RANDOM button on the remote control.



To cancel random play:
Press the DIRECT PLAY button.
"NORMAL" will appear for 2 seconds.

Notes:
- If you press the ►►I button during random play, you can move to the next track by the random operation. On the other hand, the I◄◄ button does not allow you to move to the previous track. The beginning of the track being played will be located.
- In random play, the CD player will select and play tracks automatically. (You cannot select the order of the tracks.)
- This function also works on video CDs without P.B.C.

Caution:
After performing repeat or random play, be sure to press the ■ (■/RETURN) button. Otherwise, the disc(s) will play continuously.

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CD playback (continued)

■ Programmed play

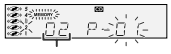
You can choose up to 32 selections for playback in the order you like.

1 **Whilst in the stop mode, press the MEMORY/SET (MEMORY) button to enter the programming save mode.**

2 **Press one of the ⊂1 - ⊂5 buttons to select the desired disc.**

Selected disc number

3 **Press the direct search buttons on the remote control to select the desired track.**



Selected track number

You can also select a track by pressing the ⏮ or ⏭ button.

4 **Press the MEMORY/SET (MEMORY) button to save the track number.**

5 **Repeat steps 2 - 4 for other tracks. Up to 32 tracks can be programmed.**

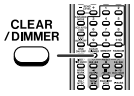
If you make a mistake, the programmed tracks can be cleared by pressing the CLEAR/DIMMER button.

6 **Press the ■ (■/RETURN) button.**

The total number of memory will appear.

7 **Press the ► / ⊂ (► ⊂ SELECT/RESUME) button to start playback.**

To clear the programmed selections:
Press the CLEAR/DIMMER button on the remote control whilst the "MEMORY" indicator is flashing.
Each time the button is pressed, one track will be cleared, beginning with the last track programmed.



To cancel the programmed play mode:
Whilst in the stop mode and the "MEMORY" indicator is lit, press the CLEAR/DIMMER button on the remote control. The "MEMORY" indicator will disappear and all the programmed contents will be cleared.

Adding tracks to the programme:
If a programme has been previously stored, the "MEMORY" indicator will be displayed. Then follow steps 1 - 6 to add tracks. The new tracks will be stored after the last track of the original programme.

To check which tracks are programmed:
Whilst the unit is stopped in the programmed play mode, press the ⏮ or ⏭ button.

Notes:
- When a disc with programmed tracks is ejected, the programme is automatically cancelled.
- Even if you press the ON/STAND-BY button to enter the stand-by mode or change the function from CD/VIDEO CD (CD) to another, the programmed selections will not be cleared.
- During the programme operation, random play is not possible.
- During programmed play, the DIRECT PLAY button will not work.
- When the MEMORY/SET (MEMORY) button is pressed in P.B.C. mode, it will be cancelled automatically and the unit will be switched to the programme mode.

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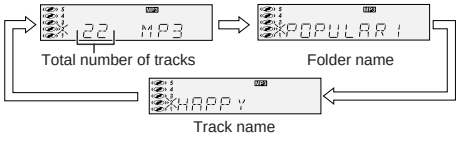
MP3 disc:
MP3 is a form of compression. It is an acronym which stands for MPEG Audio Layer 3.
MP3 is a type of audio code which is processed by significant compression from the original audio source with very little loss in sound quality.

Notes:
- Due to the structure of its disc information, it takes longer to read an MP3 disc than a normal CD (approximately 20 to 90 seconds).
- "MP3" indicator will light up after the unit reads information on an MP3 disc.
- This system supports MPEG 1 Layer 3, MPEG 2 Layer 3, and VBR files.
- During VBR file playback, time counter in the display may differ from its actual playback time.

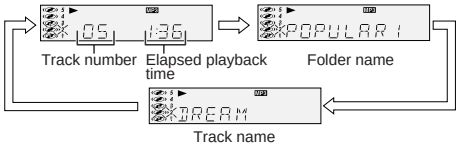
■ To change the display (MP3 discs only)

Whilst in the stop mode or playback mode, press the DISPLAY button. Each time the button is pressed, the display will change as follows.

[When in the stop mode]



[When in the playback mode]

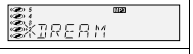


■ To select the desired folder or track by name (MP3 discs only)

1 **Whilst in the stop mode, press the DISPLAY button to display the folder name.**

2 **Select the desired folder by pressing the ⏮ or ⏭ button.**

3 **Press the DISPLAY button to display the track name.**



4 **Select the desired track by pressing the ⏮ or ⏭ button.**

5 **Press the ► / ⊂ (► ⊂ SELECT/ RESUME) button to begin playback.**

Note:
After selecting a disc with one of the ⏲1 - ⏲5 buttons, the display will not change even if the DISPLAY button is pressed, and neither the folder nor track name is displayed.

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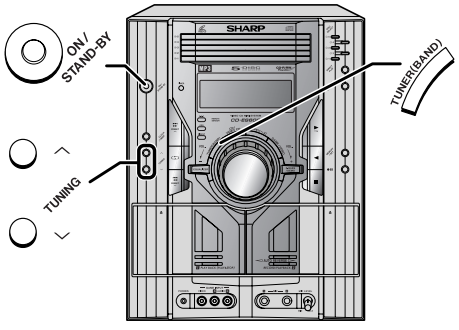
Listening to the radio



Auto power on function:
When you press any of the following buttons, the unit turns on.
- TUNER (BAND) button (main unit and remote control): The unit turns on and the "TUNER" function is activated.
- ► / ⊂ (► ⊂ SELECT/RESUME) button (main unit and remote control): The unit turns on and playback of the last function starts (CD/VIDEO CD, TAPE, TUNER, GAME).

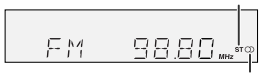
■ Tuning

1	**Press the ON/STAND-BY button to turn the power on.**
2	**Press the TUNER (BAND) button repeatedly to select the desired frequency band (FM or AM).**
3	**Press the TUNING (∨ or ∧) button to tune in to the desired station.** **Manual tuning:** Press the TUNING button as many times as required to tune in to the desired station. **Auto tuning:** When the TUNING button is pressed for more than 0.5 seconds, scanning will start automatically and the tuner will stop at the first receivable broadcast station.

Notes:
- When radio interference occurs, auto scan tuning may stop automatically at that point.
- Auto scan tuning will skip weak signal stations.
- To stop the auto tuning, press the TUNING button again.

To receive an FM stereo transmission:
Press the TUNER (BAND) button to display the "ST" indicator.
- "⊂⊃" will appear when an FM broadcast is in stereo.
- If the FM reception is weak, press the TUNER (BAND) button to extinguish the "ST" indicator. The reception changes to monaural, and the sound becomes clearer.

FM stereo mode indicator



FM stereo receiving indicator

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■ Memorising a station

You can store 40 AM and FM stations in memory and recall them at the push of a button. (Preset tuning)

1 **Perform steps 1 - 3 in "Tuning" on page 29.**

2 **Press the MEMORY/SET (MEMORY) button to enter the preset tuning saving mode.**

3 **Within 30 seconds, press the PRESET (∨ or ∧) button to select the preset channel number.**

Store the stations in memory, in order, starting with preset channel 1.

4 **Within 30 seconds, press the MEMORY/SET (MEMORY) button to store that station in memory.**

If the "MEMORY" and preset number indicators go out before the station is memorised, repeat the operation from step 2.

5 **Repeat steps 1 - 4 to set other stations, or to change a preset station.**

When a new station is stored in memory, the station previously memorised will be erased.

Note:
The backup function protects the memorised stations for a few hours should there be a power failure or the AC power lead disconnection.

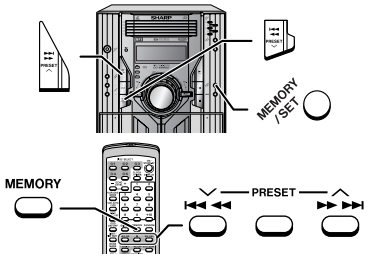
■ To recall a memorised station

Press the PRESET (∨ or ∧) button for less than 0.5 seconds to select the desired station.

■ To scan the preset stations

The stations saved in memory can be scanned automatically. (Preset memory scan)

1 Press the PRESET (∨ or ∧) button for more than 0.5 seconds. The preset number will flash and the programmed stations will be tuned in sequentially, for 5 seconds each.
2 Press the PRESET (∨ or ∧) button again when the desired station is located.



■ To erase entire preset memory

1 Press the ON/STAND-BY button to enter the stand-by mode.
2 Whilst pressing down the ●II button and the X-BASS/DEMO button, press the CLOCK/TIMER button until "TUNER CL" appears.

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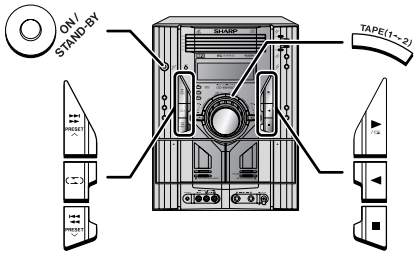
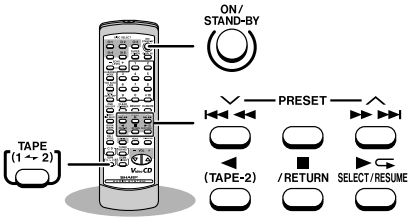
Listening to a cassette tape (TAPE 1 or TAPE 2)

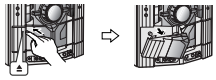
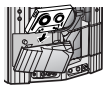
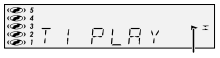
Before playback:

- **For playback, use normal or low-noise tapes for the best sound. (Metal or CrO_2 tapes are not recommended.)**
- Do not use C-120 tapes or poor-quality tapes, as they may cause malfunctions.
- Before loading a tape into the cassette compartment, tighten the slack with a pen or a pencil.





■ Tape 1 playback

1	**Press the ON/STAND-BY button to turn the power on.**
2	**Press the TAPE (1 ↔ 2) button to select TAPE 1.**
3	**Open the cassette compartment by pushing the area marked "⏏".** 
4	**Load a cassette into the TAPE 1 cassette compartment with the side to be played facing toward you.** 
5	**Press the ► / ⊂ (► ⊂ SELECT/RESUME) button to start playback.**  Tape play indicator

Auto power on function:
When you press any of the following buttons, the unit turns on.

- TAPE (1 ↔ 2) button (main unit and remote control): The unit turns on and the "TAPE" function is activated.
- ► / ⊂ (► ⊂ SELECT/RESUME) button (main unit and remote control): The unit turns on and playback of the last function starts (CD/VIDEO CD, TAPE, TUNER, GAME).

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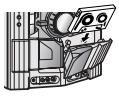
■ Tape 2 playback

1 **Press the ON/STAND-BY button to turn the power on.**

2 **Press the TAPE (1 ⇄ 2) button to select TAPE 2.**

3 **Open the cassette door by pushing the area marked "⏏".**

4 **Load a cassette into the TAPE 2 cassette compartment with side A facing you.**



5 **Press the ⇄ button to choose one side or both sides.**

⇄ ... To listen to both sides.

To play both sides (⇄), start from side A. When playback starts from side B, side A will not be played.

⇄ ... For endless repeat play of both sides.

→ ... To listen to one side.

6 **Press the ► / ⊂ (► ⊂ SELECT/RESUME) button to listen to side A, or the ◄ [◄ (TAPE-2)] button for side B.**

Forward play Reverse play

■ Various tape functions

Function	Main unit	Remote control	Operation
Side A playback			Press in the stop mode.
Side B playback (TAPE 2 only)			Press in the stop mode.
Stop			Press in the playback, fast forward or fast rewind mode.
Fast forward/Fast rewind (TAPE 2 only)			Press in the playback or stop mode.

Caution:

- To remove the cassette, press the ■ (■/RETURN) button, and then open the compartment.
- Before changing from one tape operation to another, press the ■ (■/RETURN) button.
- If a power failure occurs during tape operation, the tape head will remain engaged with the tape and the cassette door will not open. In this case, wait until the power is restored.

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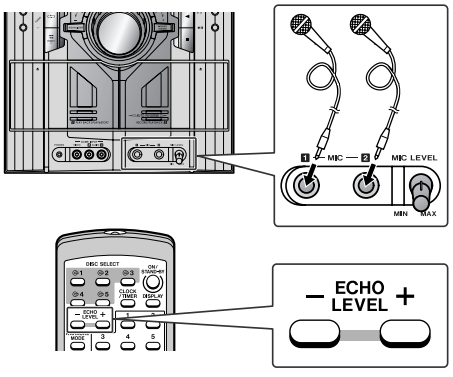
Playing karaoke

You can enjoy karaoke to video CDs, CDs, MP3 Discs, radio, cassettes, and other external devices by connecting a separately available microphone to this unit.



1 **Set the MIC LEVEL control to MIN to protect the speakers from shock noise and to avoid disturbing noises.**

2 **Connect the microphone(s) to the MIC 1 or MIC 2 socket or both sockets for enjoying duets.**

- Use a microphone with a 6.3 mm (1/4") plug, an impedance of 600 ohms.
- Use a standard plug adaptor when using a microphone with a 3.5 mm (1/8") diameter plug.

3 **Press the ON/STAND-BY button to turn the power on.**

4 **Press the CD/VIDEO CD, TUNER (BAND), TAPE (1 ↔ 2) or GAME/VIDEO button to select the audio source and play it.**

5 **Adjust the volume of the audio source using the VOLUME control.**

6 **To control the volume of both microphones, turn the MIC LEVEL control towards MAX to increase and towards MIN to decrease.**

7 **Press the ECHO LEVEL + button on the remote control to increase the microphone echo, and the ECHO LEVEL - button to decrease it.**

Notes:

- When you sing too loud through the microphone, your voice may be distorted depending on the devices connected. If this happens, lower the microphone volume.
- If an extremely sensitive microphone is used, howling may be generated.
- The unidirectional microphone is more appropriate for vocal use.
- The volume of both microphones is set simultaneously. It is recommended to use microphones of the same sensibility.

If squealing occurs:

- Reduce the microphone volume.
- Change the direction of the microphone.
- Reduce the volume of the main unit.
- Move the microphone away from the speakers.
- Keep microphones away from each other.

Caution:

- When not using the microphone, remove it from the MIC socket.
- When connecting or disconnecting the microphone, set the MIC LEVEL control to MIN.
- When using only one microphone, unplug the other.

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■ To change the audio mode

Sound of the playback source can be switched among the STEREO, L-CH, R-CH, and V-CANCEL (VOCAL CANCEL) modes.
The audio mode function is used when the left and right channels have individual signals from each other.

Press the KARAOKE MODE button on the remote control until the desired audio mode is displayed.
Each time the KARAOKE MODE button is pressed, the mode will change as follows:

STEREO → L-CH → R-CH → V-CANCEL

STEREO	Sounds on the left and right channels are played.
L-CH	Sounds on the left channel only are played.
R-CH	Sounds on the right channel only are played.
V-CANCEL	The main vocal is lowered.

Notes:
- The initial audio mode setting is "STEREO".
- In any mode other than the STEREO mode, "🎤" will appear.
- The setting will remain unchanged when you change the disc, you set the unit to the stand-by mode or the function is changed from the CD/VIDEO CD to another function.
- When playing a sound multiplexed disc on which a vocal and music have been separately recorded, select the audio mode as desired.

■ To change general stereo source to karaoke source

Even ordinary discs and tapes not recorded specifically for karaoke can be used for karaoke just by toning down the main vocal.

Press the KARAOKE MODE button on the remote control until "V-CANCEL" appears in the display.
"🎤" will appear.

Notes:
- Use discs recorded in stereo. The function will not work with mono sources.
- With some discs and tapes the original vocals may still be heard.

Notes on sound multiplexed karaoke discs:
Sound multiplexed karaoke discs are discs on which the main vocal and the BGM (Background music) have been recorded on one of the two channels and only the BGM on the other.
- The function will not work properly with discs which do not belong to this group.
- Discs on which vocal has been recorded on the left channel and music on the right may not play properly.

■ Recording of mixed sound to a cassette tape

You can record mixed sound from the microphone and CD/VIDEO CD, TUNER, TAPE 1 or GAME.

1 Press the CD/VIDEO CD, TUNER (BAND), TAPE (1 ↔ 2) or GAME/VIDEO button to select the audio source.
   - To record mixed sound from TAPE 1, press the TAPE (1 ↔ 2) button and select "TAPE 1".
2 Insert a blank tape into the TAPE 2 cassette compartment with side A facing you.
3 Press the ●II button.
4 Press the ► / ⊂ (► ⊂ SELECT/RESUME) button to record on side A, or the ◄ [◄ (TAPE-2)] button for side B.

■ Recording of the microphone signals only to a cassette tape

1 Press the TAPE (1 ↔ 2) button until "TAPE 2" appears on the display.
2 Insert a blank tape into the TAPE 2 cassette compartment with side A facing you.
3 Press the ●II button.
4 Press the ► / ⊂ (► ⊂ SELECT/RESUME) button to record on side A, or the ◄ [◄ (TAPE-2)] button for side B.

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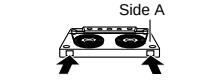
Recording on a cassette tape

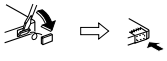
Before recording:

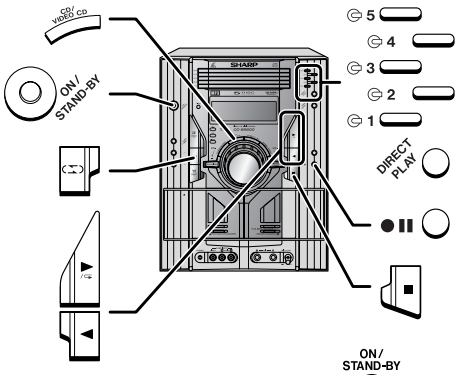
- When recording important selections, make a preliminary test to ensure that the desired material is properly recorded.
- SHARP is not liable for damage or loss of your recording arising from malfunction of this unit.
- The volume and sound controls can be adjusted with no effect on the recorded signal (Variable Sound Monitor).
- **For recording, use only normal tapes. Do not use metal or CrO_2 tapes.**

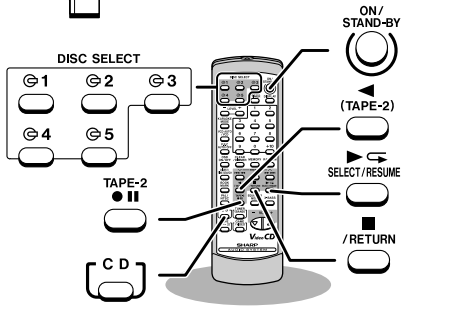
Erase-prevention tab of cassette tapes:

- When recording on a cassette tape, make sure that the erase-prevention tabs are not removed. Cassettes have removable tabs that prevent accidental recording or erasing.
- To protect the recorded sound, remove the tab after recording. Cover the tab hole with adhesive tape to record on the tape without the tab.









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■ Recording from a CD (CDs)

You can record the desired disc using the DIRECT PLAY button.

1 **Press the ON/STAND-BY button to turn the power on.**

2 **Press the CD/VIDEO CD (CD) button.**

3 **Load a cassette into the TAPE 2 cassette compartment with side A facing you.**

Wind past the leader of the tape, on which recording cannot be performed.

4 **Press the ⇄ button to choose one side or both sides.**

⇄ ... To record on both sides.

⇄ ... To record on only one side.

5 **Press the ●II button.**

Recording will be paused.

6 **Press one of the ⓒ1 - ⓒ5 buttons to select the desired disc.**

7 **Within 5 seconds, press the DIRECT PLAY button to start recording.**

- Recording starts from side A.
- Recording is started from the selected disc. When the playback of the last track is finished or the end of the tape is reached, the disc and the cassette will stop automatically.
- Playback of the disc will start approximately 7 seconds after the tape starts.

To stop recording:
Press the ■ (■/RETURN) button.
The disc and tape will stop.

Sequential recording from several discs:

1 Perform steps 1 - 6 in "Recording from a CD (CDs)".
2 Within 5 seconds, press the ► / ⊂ (► ⊂ SELECT/RESUME) button to record on side A, or the ◄ [◄ (TAPE-2)] button for side B.

To perform programmed recording:

1 Programme discs and tracks. (See page 27.)
2 Press the ●II button.
3 Press the ► / ⊂ (► ⊂ SELECT/RESUME) button to record on side A, or the ◄ [◄ (TAPE-2)] button for side B.

To stop recording:
Press the ■ (■/RETURN) button.
The disc and tape will stop.

Note:
To record on both sides, begin with side A. (If recording is started from side B, the tape will not switch over to side A.)

Auto restart function:
If the recording side is switched from side A to B during recording, the system will record the interrupted track on side B from its beginning. The recording will be made without cutting the beginning of the track on side B.

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Recording on a cassette tape (continued)

■ Recording from the radio

1 **Tune in to the desired station (see page 29).**

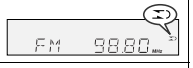
2 **Load a cassette into the TAPE 2 cassette compartment with side A facing you.**

Wind past the leader of the tape, on which recording cannot be performed.

3 **Press the ⊂⊃ button to choose one side or both sides.**

⊃ ... To record on both sides.

⊐ ... To record on only one side.



4 **Press the ●II button.**

Recording will be paused.

5 **Press the ► / ⊂ (► ⊂ SELECT/RESUME) button to record on side A, or the ◄ [◄ (TAPE-2)] button for side B.**

To record on both sides, begin with side A. (If recording is started from side B, the tape will not switch over to side A.)

To interrupt recording:
Press the ●II button.
To resume recording, press the same recording button you pressed in step 5. Other buttons do not allow resuming.

To stop recording:
Press the ■ (■/RETURN) button.

Note:
If you hear a whistling noise whilst recording an AM station, move the AM loop aerial.

■ Dubbing from tape to tape

You can record from TAPE 1 to TAPE 2.

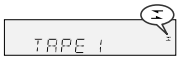
1 **Press the ON/STAND-BY button to turn the power on.**

2 **Load a prerecorded cassette into the TAPE 1 cassette compartment. Insert a blank tape into the TAPE 2 cassette compartment.**

It is recommended that the recording tape is the same length as the master tape.

3 **Press the TAPE (1 ↔ 2) button until "TAPE 1" appears on the display.**

The reverse mode will be set to "⊐".



4 **Press the ●II button.**

Recording will be paused.

5 **Press the ► / ⊂ (► ⊂ SELECT/RESUME) button to start dubbing.**

To stop dubbing:
Press the ■ (■/RETURN) button.
TAPE 1 and TAPE 2 will simultaneously stop.

■ Erasing recorded tapes

1 Load the tape to be erased into the TAPE 2 cassette compartment with the side to be erased facing toward you.
2 Press the TAPE (1 ↔ 2) button until "TAPE 2" appears on the display.
3 Set the ⊂⊃ button to "⊐" to erase only one side and to "⊃" to erase both sides.
4 Press the ●II button.
5 Press the ► / ⊂ (► ⊂ SELECT/RESUME) button to erase side A, or the ◄ [◄ (TAPE-2)] button to erase side B.
To erase both sides, begin with side A. (If erasing is started from side B, the tape will not switch over to side A.)

Note:
Make sure that the TAPE 1 is not in use.

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Timer and sleep operation

Timer playback:
The unit turns on and plays the desired source (video CD, CD, MP3 disc, tuner, tape) at the preset time.

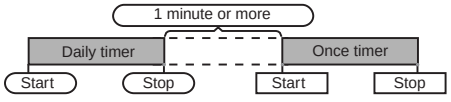
Timer recording:
The unit turns on and starts recording from the tuner at the preset time.

This unit has 2 types of timer: ONCE TIMER and DAILY TIMER.

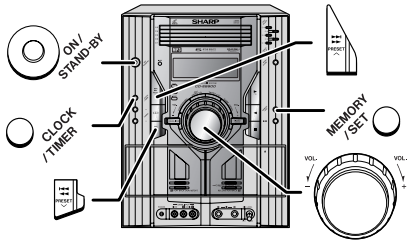
Once timer: Once timer play or once timer recording works for one time only at a preset time.
For example, if you are away but want to record a programme on a radio station.

Daily timer: Daily timer play or daily timer recording works at the same preset time every day.
For example, set the timer as a wake-up call every morning.

Using the once timer and daily timer in combination:
For example, use the once timer to record a radio programme, and use the daily timer to wake up.
1 Set the daily timer (pages 38 - 40).
2 Set the once timer (pages 38 - 40).



Note:
When set times for the daily timer and once timer overlap, the once timer takes priority. Allow an interval of at least 1 minute between operations.



■ Timer playback or timer recording

Before setting timer:

1 Check that the clock is set to the correct time (refer to page 15).
If it is not set, you cannot use the timer function.
2 For timer playback: Load a cassette or discs to be played.
For timer recording: Load a cassette for recording in the TAPE 2 cassette compartment.

⇩

1 Press the ON/STAND-BY button to turn the power on.

2 Press the CLOCK/TIMER button.

3 Within 10 seconds, press the ⏮ ◀◀ or ▶▶ ⏭ button to select "ONCE" or "DAILY", and press the MEMORY/SET button.

Set the unit to the correct time if "ONCE" or "DAILY" does not appear.

Continued to the next page

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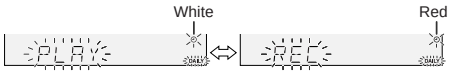
Timer and sleep operation (continued)

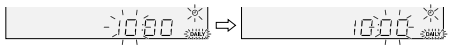
4 **Within 10 seconds, press the ⏮ ◀◀ or ▶▶ ⏭ button to select "ONCE SET" or "DAILY SET", and press the MEMORY/SET button.**

5 **Press the ⏮ ◀◀ or ▶▶ ⏭ button to select "PLAY" or "REC", and press the MEMORY/SET button.**



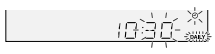
The illustrations show the daily timer setting.

6 **Press the ⏮ ◀◀ or ▶▶ ⏭ button to adjust the hour and then press the MEMORY/SET button.**



The illustrations show the timer playback setting in the daily timer mode.

7 **Press the ⏮ ◀◀ or ▶▶ ⏭ button to adjust the minutes and then press the MEMORY/SET button.**



8 **Set the time to finish as in steps 6 and 7 above.**

9 **Switch input with the ⏮ ◀◀ or ▶▶ ⏭ button, and then press the MEMORY/SET button.**

To select the timer playback source: CD/VIDEO CD, TUNER, TAPE 1 or TAPE 2.

To select the timer recording source: TUNER.

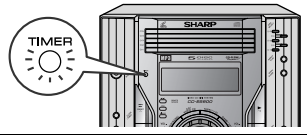
- When you select the tuner, select a station by pressing the ⏮ ◀◀ or ▶▶ ⏭ button, and then press the MEMORY/SET button.
- If a station has not been programmed, " NO P.SET" will be displayed and timer setting will be cancelled.

10 **Adjust the volume using the VOLUME control, and then press the MEMORY/SET button.**

Do not turn the volume up too high.

11 **Press the ON/STAND-BY button to enter the power stand-by mode.**

The "TIMER" indicator lights up and the unit is ready for timer playback or timer recording.



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12 When the preset time is reached, playback or recording will start.

The volume will increase gradually until it reaches the preset volume.

13 When the timer end time is reached, the system will enter the power stand-by mode automatically.

Once timer:

The timer will be cancelled.

Daily timer:

The timer will operate at the same time every day. It will continue until the daily timer setting is cancelled. Cancel the daily timer when it is not in use.

Note:

When performing timer playback or recording using another unit connected to the GAME INPUT sockets, select "GAME" in step 9.
This unit will turn on or enter the power stand-by mode automatically, however, the connected unit will not turn on or off.

Checking the timer setting in the timer stand-by mode:

1 Press the CLOCK/TIMER button.
2 Within 10 seconds, press the I◀◀ ◀◀ or ▶▶ ▶▶I button to select "ONCE" or "DAILY", and press the MEMORY/SET button.
3 Within 10 seconds, press the I◀◀ ◀◀ or ▶▶ ▶▶I button to select "ONCE CAL" or "DAILY CAL", and press the MEMORY/SET button.
The unit returns to the timer stand-by mode after displaying the settings in order.

Cancelling the timer setting in the timer stand-by mode:

1 Press the CLOCK/TIMER button.
2 Within 10 seconds, press the I◀◀ ◀◀ or ▶▶ ▶▶I button to select "ONCE" or "DAILY", and press the MEMORY/SET button.
3 Within 10 seconds, press the I◀◀ ◀◀ or ▶▶ ▶▶I button to select "ONCE OFF" or "DAILY OFF", and press the MEMORY/SET button.
Timer will be cancelled (the setting will not be cancelled).

Reusing the memorised timer setting:

The timer setting will be memorised once it is entered. To reuse the same setting, perform the following operations.

1 Turn the power on and press the CLOCK/TIMER button.
2 Within 10 seconds, press the I◀◀ ◀◀ or ▶▶ ▶▶I button to select "ONCE" or "DAILY", and press the MEMORY/SET button.
3 Within 10 seconds, press the I◀◀ ◀◀ or ▶▶ ▶▶I button to select "ONCE ON" or "DAILY ON", and press the MEMORY/SET button.
4 Press the ON/STAND-BY button to enter the power stand-by mode.

Note:

The timer can also be set with the remote control.

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Timer and sleep operation (continued)

■ Sleep operation

The radio, compact disc and cassette tape can all be turned off automatically.

1 **Play back the desired sound source.**

2 **Press the CLOCK/TIMER button.**

3 **Within 10 seconds, press the I◀◀ ◀◀ or ▶▶ ▶▶I button to select "SLEEP", and press the MEMORY/SET button.**

4 **Press the I◀◀ ◀◀ or ▶▶ ▶▶I button to select the time.**

(Maximum: 3 hours - Minimum: 1 minute)

- 3 hours - 5 minutes → 5-minute intervals
- 5 minutes - 1 minute → 1-minute intervals

5 **Press the MEMORY/SET button.**

"SLEEP" will appear.

6 **The unit will enter the power stand-by mode automatically after the preset time has elapsed.**

The volume will be turned down 1 minute before the sleep operation finishes.

To confirm the remaining sleep time:

1 Whilst "SLEEP" is indicated, press the CLOCK/TIMER button.
2 Within 10 seconds, press the I◀◀ ◀◀ or ▶▶ ▶▶I button to select "SLEEP X : XX".
"X : XX" is remaining sleep time.

- The remaining sleep time is displayed for about 10 seconds.
- You can change the remaining sleep time whilst it is displayed by pressing the MEMORY/SET button (steps 4 - 5).

To cancel the sleep operation:

Press the ON/STAND-BY button whilst "SLEEP" is indicated.
To cancel the sleep operation without setting the system to the stand-by mode, proceed as follows.

1 Whilst "SLEEP" is indicated, press the CLOCK/TIMER button.
2 Within 10 seconds, press the I◀◀ ◀◀ or ▶▶ ▶▶I button to select "SLEEP OFF", and press the MEMORY/SET button.

■ To use timer and sleep operation together

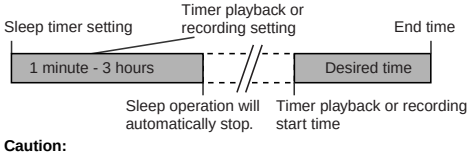
Sleep and timer playback:

For example, you can fall asleep listening to the radio and wake up to CD in the next morning.

Sleep and timer recording:

For example, you can fall asleep listening to the CD and record radio programmes whilst sleeping.

1 Set the sleep time (see left, steps 1 - 5).
2 Whilst the sleep timer is set, set the timer playback or recording (steps 2 - 10, pages 38 - 39).


Sleep timer setting
Timer playback or recording setting
End time
1 minute - 3 hours
Desired time
Sleep operation will automatically stop.
Timer playback or recording start time

Caution:

When using the cassette deck, be sure the tape length is long enough to perform both functions. If you want to sleep and wake up listening to a tape, and the length of the tape is shorter than the sleep timer setting, timer playback or recording will not be possible.

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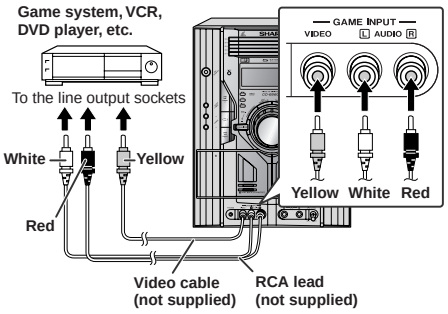
Enhancing your system

The connection lead is not included. Purchase a commercially available lead as shown below.



Auto power on function:
When you press any of the following buttons, the unit turns on.

- GAME/VIDEO button (main unit and remote control): The unit turns on and the "GAME" function is activated.
- ► / ⊂ (► ⊂ SELECT/RESUME) button (main unit and remote control): The unit turns on and playback of the last function starts (CD/VIDEO CD, TAPE, TUNER, GAME).

■ Listening to sounds of game, VCR, DVD, etc.

1. **Connect a video game system, VCR, DVD, etc. to the front GAME INPUT (VIDEO, AUDIO L and R) sockets.**
2. **Connect a TV to the rear VIDEO OUT socket.**
   Switch the TV input to auxiliary.
3. **Press the ON/STAND-BY button to turn the power on.**
4. **Press the GAME/VIDEO button.**
5. **Play the connected equipment.**
   You can enjoy sounds from the supplied speakers and images on the TV.

Note:
To prevent noise interference, place the unit away from the television.

■ To record sounds of game, VCR, etc.

1. **Insert a cassette in the TAPE 2 cassette compartment.**
2. **Press the GAME/VIDEO button.**
3. **Press the ●II button.**
4. **Press the ► / ⊂ (► ⊂ SELECT/RESUME) or ◄ [◄ (TAPE-2)] button.**
5. **Start the game system, VCR, etc.**

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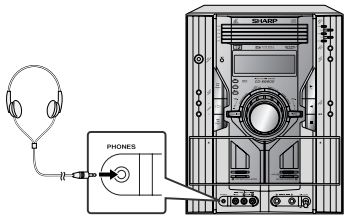

■ Headphones

- Before plugging in or unplugging the headphones, reduce the volume.
- Be sure your headphones have a 3.5 mm (1/8") diameter plug and the impedance is between 16 ohms and 50 ohms. The recommended impedance is 32 ohms.
- Plugging in the headphones disconnects the speakers automatically. Adjust the volume using the VOLUME control.

Troubleshooting chart

Many potential problems can be resolved by the owner without calling a service technician.
If something is wrong with this product, check the following before calling your authorised SHARP dealer or service centre.

■ General

Symptom	Possible cause
● The clock is not set to the correct time.	● Did a power failure occur? Reset the clock. (Refer to page 15.)
● When a button is pressed, the unit does not respond.	● Set the unit to the power stand-by mode and then turn it back on. ● If the unit still malfunctions, reset it. (Refer to page 45.)
● No sound is heard.	● Is the volume level set to "0"? ● Are the headphones connected? ● Are the speaker wires disconnected? ● Is the karaoke mode set to "L-CH", "R-CH" or "V-CANCEL"?

■ Video CD

Symptom	Possible cause
● The picture is not displayed during playback.	● Is the TV unplugged? ● Is the unit connected improperly? ● Is the input selector on the TV set to other than "VCR"? ● Is the unit being played without selecting video CD?
● The picture quality is poor, or it is distorted.	● Is the disc very dirty?

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■ CD player

Symptom	Possible cause
● Playback does not start. ● Playback stops in the middle or is not performed properly.	● Is the disc loaded upside down? ● Does the disc satisfy the standards? ● Is the disc distorted or scratched?
● Playback sounds are skipped, or stopped in the middle of a track.	● Is the unit located near excessive vibrations? ● Is the disc very dirty? ● Has condensation formed inside the unit?

■ Cassette deck

Symptom	Possible cause
● Cannot record.	● Is the erase-prevention tab removed?
● Cannot record tracks with proper sound quality. ● Cannot erase completely.	● Is it a normal tape? (You cannot record on a metal or CrO_2 tape.)
● Sound skipping. ● Cannot hear treble. ● Sound fluctuation.	● Is there slack in the tape? ● Is the tape stretched? ● Are the capstans, pinch rollers, or heads dirty?
● Cannot remove the tape.	● If a power failure occurs during playback, the heads remain engaged with the tape. Do not open the compartment with great force.

■ Tuner

Symptom	Possible cause
● The radio makes unusual noises continuously.	● Is the unit placed near the TV or computer? ● Is the FM aerial or AM loop aerial placed properly? Move the aerial away from the AC power lead if it's located nearby.

■ Karaoke

Symptom	Possible cause
● The vocal part of a multiplexed disc is not heard.	● Is the karaoke mode set to "L-CH", "R-CH" or "V-CANCEL"?

■ Remote control

Symptom	Possible cause
● The remote control does not operate.	● Is the AC power lead of the unit plugged in? ● Is the battery polarity correct? ● Are the batteries dead? ● Is the distance or angle incorrect? ● Does the remote control sensor receive strong light?

■ Condensation

Sudden temperature changes, storage or operation in an extremely humid environment may cause condensation inside the cabinet (CD pickup, tape heads, etc.) or on the transmitter on the remote control. Condensation can cause the unit to malfunction. If this happens, leave the power on with no disc (or cassette) in the unit until normal playback is possible (about 1 hour). Wipe off any condensation on the transmitter with a soft cloth before operating the unit.

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■ If trouble occurs

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

If such a problem occurs, do the following:

1 Set the unit to the stand-by mode and turn the power on again.
2 If the unit is not restored in the previous operation, unplug and plug in the unit, and then turn the power on.

Note:
If neither operation above restores the unit, clear all the memory by resetting it.

■ Clearing all the memory (reset)

1 Press the ON/STAND-BY button to enter the power stand-by mode.
2 Whilst pressing down the ●II button and the X-BASS/DEMO button, press the I◄◄ ◄◄ PRESET ∨ button until "CLEAR AL" appears.

Caution:
This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD programme.

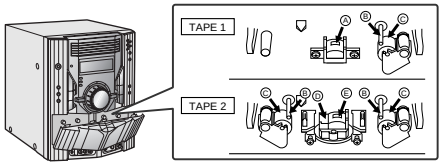
■ Before transporting the unit

Remove all CDs from the unit. Make sure there is no CD in the disc tray. Then, set the unit to the power stand-by mode. Carrying the unit with discs left inside can damage the unit.

Maintenance

■ Cleaning the tape-handling parts

- Dirty heads, capstans or pinch rollers can cause poor sound and tape jams. Clean these parts with a cotton swab moistened with commercial head/pinch roller cleaner or isopropyl alcohol.
- When cleaning the heads, pinch rollers, etc., unplug the unit which contains high voltages.



Ⓐ Playback head
Ⓑ Capstan
Ⓒ Pinch roller
Ⓓ Erase head
Ⓔ Recording/Playback head

- After long use, the deck's heads and capstans may become magnetised, causing poor sound. Demagnetise these parts once every 30 hours of playing/recording time by using a commercial tape head demagnetiser. Read the demagnetiser's instructions carefully before use.

■ Cleaning the cabinet

Periodically wipe the cabinet with a soft cloth and a diluted soap solution, then with a dry cloth.

Caution:

- Do not use chemicals for cleaning (petrol, paint thinner, etc.). It may damage the cabinet finish.
- Do not apply oil to the inside of the unit. It may cause malfunctions.

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Specifications

As part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

■ General

Power source	AC 110/127/220/230 - 240 V, 50/60 Hz
Power consumption	120 W
Dimensions	Width: 260 mm (10-1/4") Height: 330 mm (13") Depth: 326 mm (12-7/8")
Weight	8.7 kg (19.2 lbs.)

■ Amplifier

Output power	MPO: 450 W (225 W + 225 W) (10 % T.H.D.) RMS: 240 W (120 W + 120 W) (10 % T.H.D.) RMS: 180 W (90 W + 90 W) (0.9 % T.H.D.)
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms) Video out: 1 Vp-p (75 ohms)
Input terminals	Game/ Auxiliary (audio signal): 500 mV/ 47 k ohms Game/Video: 1 Vp-p Microphone 1/2: 1 mV/600 ohms

■ Video CD

Video output format	PAL/NTSC

■ CD player

Type	5-disc multi-play compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

■ Tuner

Frequency range	FM: 88.0 - 108.0 MHz AM: 531 - 1,602 kHz

■ Cassette deck

Frequency response	50 - 14,000 Hz (normal tape)
Signal/noise ratio	55 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter	0.3 % (WRMS)

■ Speaker

Type	2-way type speaker system with passive radiator 5 cm (2") tweeter 13 cm (5-1/8") woofer 10 cm (4") passive radiator
Maximum input power	240 W
Rated input power	120 W
Impedance	6 ohms
Dimensions	Width: 252 mm (9-7/8") Height: 330 mm (13") Depth: 249 mm (9-13/16")
Weight	3.6 kg (7.9 lbs.)/each

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UP

DOWN

CD-ES600V VIDEO CD MINI SYSTEM

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